

Amendments to and Listing of the Claims:

Please amend claims 1, 2, and 12, without prejudice or disclaimer, cancel claims 22-33, without prejudice or disclaimer, as set forth in the following listing of claims, which will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of functionally ~~connecting a portion treating for~~ avulsion of a nerve root between the central nervous system and the peripheral nervous system, or ~~avulsion of the peripheral nervous system of in a living vertebrate to a portion of the central or~~ peripheral nervous system of the vertebrate, comprising bringing the an avulsed end portion of the peripheral nervous system and ~~the another avulsed end portion~~ of the central or peripheral nervous system at a nerve root, or an avulsed end and another avulsed end, ~~portion of the peripheral nervous system and the portion of the central or peripheral nervous system~~ close to each other, without an intermediate graft, applying to the gap between the two avulsed ends portions a fibrin glue mixture comprising a growth factor, fibrinogen, aprotinin and divalent calcium ions so that the fibrin glue mixture is simultaneously in contact with the two avulsed ends portions, forming an attachment between the ~~portion of the peripheral nervous system and the portion of the central or peripheral nervous system of the vertebrate~~ avulsed ends, and suturing or anastomosing the two ~~portions of the nervous system avulsed ends~~ to be connected.

2. (Currently Amended) The method of claim 1, wherein the ~~portion~~ avulsed end of the peripheral nervous system is connected to the other ~~portion~~ avulsed end of the central nervous system at a nerve root.

3. (Original) The method of claim 1, wherein the growth factor is selected from the group consisting of a glial cell line-derived neurotrophic factor, transforming growth factor-beta, fibroblast growth factor, platelet-derived growth factor and epidermal growth factor, vascular endothelial growth factor, and neurotrophin.

4. (Original) The method of claim 1, wherein the components of the fibrin glue mixture can be applied to the gap simultaneously or separately.

5. (Original) The method of claim 3, wherein the growth factor is fibroblast growth factor, which is acidic or basic fibroblast growth factor.

6. (Original) The method of claim 5, wherein the fibroblast growth factor is acidic fibroblast growth factor.

7. (Original) The method of claim 1, wherein the divalent calcium ions are provided by the addition of calcium chloride or calcium carbonate.

8. (Original) The method of claim 1, wherein the fibrin glue mixture comprises fibroblast growth factor, fibrinogen, aprotinin and calcium chloride.

9. (Original) The method of claim 1, wherein the fibrin glue mixture is acidic fibroblast growth factor, fibrinogen, aprotinin and calcium chloride.

10. (Original) The method of claim 9, wherein the fibrin glue mixture comprises 0.0001-1000 mg/ml of fibroblast growth factor, 10-1000 mg/ml of fibrinogen, 10-500 KIU/ml of aprotinin and 1-100 mM of calcium chloride.

11. (Original) The method of claim 10, wherein the fibrin glue mixture comprises 1 mg/ml of fibroblast growth factor, 100 mg/ml of fibrinogen, 200 KIU/ml of aprotinin and 8 mM of calcium chloride.

12. (Currently Amended) A method of functionally reconnecting an avulsed end of a cervical root to the spinal cord to be connected in a living vertebrate, comprising bringing the avulsed end of the cervical root close to the avulsed end of the spinal cord, without an intermediate graft, applying to the gap between cervical root and the spinal cord the two avulsed ends a fibrin glue mixture comprising a growth factor, fibrinogen, aprotinin and divalent calcium ions so that the fibrin glue mixture is simultaneously in contact with the avulsed end of the cervical root and avulsed end of the spinal cord, and forming an attachment between the cervical root and the spinal cord of said vertebrate.

13. (Original) The method of claim 12, wherein the growth factor is selected from the group consisting of a glial cell line-derived neurotrophic factor, transforming growth factor-beta, fibroblast growth factor, platelet-derived growth factor and epidermal growth factor, vascular endothelial growth factor, and neurotrophin.

14. (Original) The method of claim 12, wherein the components of the fibrin glue mixture can be applied to the gap simultaneously or separately.

15. (Original) The method of claim 13, wherein the growth factor is fibroblast growth factor, which is acidic or basic fibroblast growth factor.

16. (Original) The method of claim 15, wherein the fibroblast growth factor is acidic fibroblast growth factor.

17. (Original) The method of claim 12, wherein the divalent calcium ions are provided by the addition of calcium chloride or calcium carbonate.

18. (Original) The method of claim 12, wherein the fibrin glue mixture comprises fibroblast growth factor, fibrinogen, aprotinin and calcium chloride.

19. (Original) The method of claim 12, wherein the fibrin glue mixture comprises acidic fibroblast growth factor, fibrinogen, aprotinin and calcium chloride.

20. (Original) The method of claim 19, wherein the fibrin glue mixture comprises 0.0001-1000 mg/ml of fibroblast growth factor, 10-1000 mg/ml of fibrinogen, 10-500 KIU/ml of aprotinin and 1-100 mM of calcium chloride.

21. (Original) The method of claim 20, wherein the fibrin glue mixture comprises 1 mg/ml of fibroblast growth factor, 100 mg/ml of fibrinogen, 200 KIU/ml of aprotinin and 8 mM of calcium chloride.

22.-33. (Cancelled)